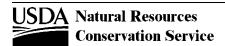
Table H. - Engineering Index Properties

Caroline County, Virginia

Absence of an entry indicates that the data were not estimated.

Man Complete			Classi	fication	Fragi	ments	Per	cent Passin	g Sieve Nun	nber	Limited	Diestisit
Map Symbol and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	- Liquid Limit	Plasticity Index
	In		•	•	Pct	Pct	•	•	•		Pct	
1A:												
Altavista	0-14	Loam Sandy Loam	CL-ML SC-SM	A-2 A-4	0	0	95-100	93-100	55-95	27-75	21-40	6-16
		Fine Sandy Loam	30-3W	/\- -1								
	14-62	Sandy Loam	CL	A-6	0	0	95-100	93-100	55-100	27-80	27-44	12-25
		Loam	SC	A-7								
		Sandy Clay Loam Clay Loam	SC-SM									
Chewacla												
Roanoke												
Chastain												
Riverview												
Tomotley												
1B:												
Altavista	0-14	Sandy Loam Fine Sandy Loam	CL-ML SC-SM	A-2 A-4	0	0	95-100	93-100	55-95	27-75	21-40	6-16
	14-62	Loam Sandy Loam	CL	A-6	0	0	95-100	93-100	55-100	27-80	27-44	12-25
		Loam	SC	A-7								
		Sandy Clay Loam Clay Loam	SC-SM									
Chastain												
Chewacla												



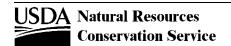
Mara Oranahad			Class	fication	Frag	ments	Per	cent Passin	g Sieve Nun	nber	Limital	Disatisit
Map Symbol and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	Liquid Limit	Plasticity Index
	ln			•	Pct	Pct	•	•		•	Pct	•
1B:												
Riverview												
Roanoke												
Tomotley												
2B:												
Appling	0-10	Sandy Loam	SC-SM SM	A-2	0	0	90-100	85-100	51-70	26-40	17-35	2-13
	10-57	Clay Clay Loam Sandy Clay	CL	A-7	0	0	90-100	85-100	76-100	60-95	37-66	21-43
	57-62	Sandy Clay Loam Loam Sandy Loam	CL SC	A-4	0	0	90-100	85-100	51-95	26-75	20-40	6-21
Emporia												
Helena												
2C:												
Appling	0-10	Sandy Loam	SC-SM SM	A-2	0	0	90-100	85-100	51-70	26-40	17-35	2-13
	10-57	Clay Clay Loam Sandy Clay	CL	A-7	0	0	90-100	85-100	76-100	60-95	37-66	21-43
	57-62	Sandy Loam Sandy Clay Loam Loam	CL SC	A-4	0	0	90-100	85-100	51-95	26-75	20-40	6-21
Emporia												

Man Comphal			Classi	fication	Frag	ments	Per	cent Passin	g Sieve Nun	nber	المناسنا	Disatisit
Map Symbol and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	- Liquid Limit	Plasticity Index
	In			•	Pct	Pct	•		•	•	Pct	•
2C:												
Helena												
3A:												
Bama	0-4	Sandy Loam	SC SC-SM SM	A-2 A-4	0	0	90-100	85-100	51-70	26-40	19-33	3-13
	4-13	Fine Sandy Loam Sandy Loam Loam	CL SC SC-SM	A-6	0	0	90-100	85-100	51-95	26-75	27-38	12-19
	13-79	Clay Loam Sandy Clay Loam	CL SC	A-6	0	0	90-100	85-100	68-100	30-80	29-44	13-25
Emporia												
Slagle												
3B:												
Bama	0-4	Sandy Loam	SC SC-SM SM	A-2 A-4	0	0	90-100	85-100	51-70	26-40	19-33	3-13
	4-13	Loam Fine Sandy Loam Sandy Loam	CL SC SC-SM	A-6	0	0	90-100	85-100	51-95	26-75	27-38	12-19
	13-79	Clay Loam Sandy Clay Loam	CL SC	A-6	0	0	90-100	85-100	68-100	30-80	29-44	13-25
Emporia												
Slagle												

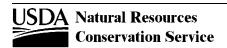
Caroline County, Virginia

Man Ormhal			Class	fication	Fragi	ments	Per	cent Passino	g Sieve Nun	nber	I tan dal	Disabisit
Map Symbol and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	Liquid Limit	Plasticity Index
	In		•	•	Pct	Pct					Pct	
4A:												
Bibb	0-6	Sandy Loam	SC-SM SM	A-2 A-4	0	0	90-100	85-100	51-70	26-40	0-35	NP-12
	6-62	Gravelly Sand Sand Gravelly Loamy Sand Fine Sandy Loam	CL-ML ML SC-SM SM SP-SM	A-2 A-4	0	0	90-100	85-100	42-85	4-55	0-31	NP-12
Chastain	0-5	Loam	CL CL-ML ML	A-4 A-6 A-7	0	0	95-100	93-100	78-95	55-75	22-51	4-19
	5-31	Clay Clay Loam Silty Clay Loam	CH CL	A-6 A-7	0	0	95-100	93-100	83-100	65-95	39-72	19-43
	31-72	Silty Clay Clay Clay Loam Silty Clay Loam	CH CL	A-6 A-7	0	0	95-100	93-100	83-100	65-95	35-67	18-43
Chewacla												
fine loamy poorly drained soils												
ponded soils												
very poorly drained muck soils												

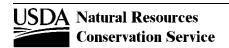
5B:



Map Symbol			Classi	fication	Fragi	ments	Per	cent Passin	g Sieve Nun	nber	Liquid	Plasticity
and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	Limit	Index
	In	-	•	•	Pct	Pct	•				Pct	•
5B:												
Bojac	0-8	Fine Sandy Loam Loamy Sand Loamy Fine Sand Sandy Loam	CL-ML ML SC-SM SM	A-2 A-4	0	0	95-100	93-100	46-85	14-55	0-33	NP-12
	8-35	Sandy Loam Loam Fine Sandy Loam	SC-SM	A-2 A-4	0	0	95-100	93-100	55-85	27-55	18-30	4-12
	35-62	Sand Loamy Sand	SM SP	A-1 A-2 A-3	0	0	85-100	80-100	40-75	4-30	0-20	NP-3
Altavista												
Chewacla												
Riverview												
Tarboro												
6B:												
Cecil	0-8	Fine Sandy Loam Sandy Loam	SC-SM SM	A-2 A-4	0	0-5	90-100	85-100	51-85	26-55	17-33	2-13
	8-56	Clay Loam Clay	CL	A-6	0	0-5	90-100	85-100	76-100	60-95	37-66	21-43
	56-72	Loam Sandy Loam	CL SC	A-2 A-4 A-6	0	0-5	90-100	85-100	51-95	26-75	20-31	6-13
Emporia												
Helena												



Map Symbol			Classi	fication	Fragi	ments	Per	cent Passin	g Sieve Nun	nber	Liquid	Plasticity
and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	Limit	Index
	In				Pct	Pct					Pct	
7A: Chastain	0-5	Silt Loam Loam	CL CL-ML ML	A-4 A-6 A-7	0	0	95-100	93-100	78-95	55-75	22-51	4-19
	5-31	Silty Clay Loam Clay Clay Loam	CH CL	A-6 A-7	0	0	95-100	93-100	83-100	65-95	39-72	19-43
	31-72	Clay Clay Loam Silty Clay Loam Silty Clay	CL	A-6 A-7	0	0	95-100	93-100	83-100	65-95	35-67	18-43
Roanoke												
Rappahannock												
Riverview												
Tomotley												
8A:												
Chewacla	0-8	Sandy Loam Fine Sandy Loam Loam Silt Loam	CL CL-ML ML	A-4 A-6 A-7	0	0	95-100	93-100	55-100	27-90	22-45	6-18
	8-62	Stratified Sand To Clay Silty Clay Loam	CL ML	A-4 A-6 A-7	0	0	90-100	85-100	42-100	4-95	0-52	NP-28
Altavista												
Bojac												

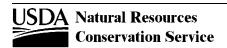


Man Cumbal			Classi	fication	Fragr	ments	Per	cent Passin	g Sieve Nun	nber	Liquid	Diosticity
Map Symbol and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	- Liquid Limit	Plasticity Index
	In		•	•	Pct	Pct					Pct	•
8A:												
Chastain												
Riverview												
Roanoke												
Tomotley												
Rappahannock												
9C:												
Helena	0-4	Fine Sandy Loam Loam Sandy Loam	ML SC SC-SM	A-2 A-4	0	0	90-100	80-100	48-95	24-75	17-35	2-13
	4-57	Clay Sandy Clay Clay Loam	SM CH	A-7	0	0	90-100	80-100	72-100	56-95	41-69	21-44
	57-70	Sandy Loam Sandy Clay Loam Loam	CL SC	A-4	0	0	90-100	80-100	48-95	24-75	20-40	6-21
Appling	0-10	Sandy Loam	SC-SM SM	A-2	0	0	90-100	85-100	51-70	26-40	17-35	2-13
	10-57	Clay Clay Loam Sandy Clay	CL	A-7	0	0	90-100	85-100	76-100	60-95	37-66	21-43
	57-62	Sandy Clay Sandy Loam Sandy Clay Loam Loam	CL SC	A-4	0	0	90-100	85-100	51-95	26-75	20-40	6-21
Emporia												

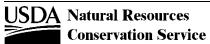


Map Symbol			Classi	fication	Fragr	nents	Per	cent Passin	g Sieve Nun	nber	Liquid	Plasticity
and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	Limit	Index
9C:	In				Pct	Pct					Pct	
somewhat poorly drained to poorly drained, fine loamy to cla												
well drained clayey soils												
10E:												
Kempsville	0-7	Fine Sandy Loam Loamy Sand Sandy Loam	CL-ML ML SC-SM SM	A-2 A-4	0	0	90-100	80-100	40-85	12-55	17-31	2-10
	7-68	Clay Loam Loam Fine Sandy Loam Sandy Clay Loam	CL CL-ML SC	A-2 A-4	0	0	65-100	50-100	35-100	20-80	23-50	7-28
	68-74	Sandy Loam Loam Sandy Clay Loam	CL SC	A-2 A-6	0	0	50-100	35-100	21-90	10-80	27-44	12-25

Mara Currahal			Classi	fication	Fragi	ments	Per	cent Passin	g Sieve Nun	nber	Liannial	Disatisit
Map Symbol and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	- Liquid Limit	Plasticity Index
	In	•	•	•	Pct	Pct		•			Pct	•
10E:												
Emporia	0-17	Sandy Loam	CL	A-2	0	0	90-100	80-100	48-95	24-75	19-33	3-12
		Loam	ML	A-4								
		Fine Sandy Loam	SC	A-6								
			SM									
	17-51	Sandy Clay Loam	CL	A-2	0	0	65-100	50-100	45-95	30-80	31-50	14-29
		Sandy Clay	SC	A-6								
		Loam		A-7								
		Clay										
		Clay Loam										
		Fine Sandy Loam										
	54 3 4	Gravelly Sandy Clay Loam	01		•	•	50.400	05.400	00.400	40.05	40.50	0.00
	51-74	Very Gravelly Sandy Clay Loam	CL	A-1	0	0	50-100	35-100	28-100	12-95	18-50	2-29
		Clay Loam	ML	A-2								
		Gravelly Clay Loam	SC SM	A-4 A-6								
		Clay	SIVI	A-0								
Remlik	0-6	Loamy Fine Sand Sand	SM	A-2	0	0	90-100	80-100	40-85	4-45	0-28	NP-7
		Loamy Sand										
	6-30	Gravelly Loamy Sand	SC-SM	A-1	0	0	60-100	50-100	25-75	2-30	0-24	NP-6
		Sand	SM	A-2								
		Loamy Sand	SW-SM									
		Gravelly Sand										
	30-59	Gravelly Sandy Loam	SC	A-2	0	0	60-100	50-100	30-90	15-55	18-36	4-17
		Sandy Loam	SC-SM	A-4								
		Sandy Clay Loam		A-6								
		Fine Sandy Loam										
	59-72	Gravelly Sand	SC-SM	A-2	0	0	60-100	50-100	25-75	2-30	0-24	NP-7
		Gravelly Loamy Sand	SM	A-3								
		Sand	SP-SM									
		Loamy Sand										



Man Comphal			Class	ification	Frag	ments	Per	cent Passin	g Sieve Nun	nber	Liamid	Disatisite
Map Symbol and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	- Liquid Limit	Plasticity Index
	ln		•		Pct	Pct	•			•	Pct	•
10E:												
Chastain												
Bibb												
11A:												
Kempsville	0-7	Sandy Loam Fine Sandy Loam Loamy Sand	CL-ML ML SC-SM SM	A-2 A-4	0	0	90-100	80-100	40-85	12-55	17-31	2-10
	7-68	Loam Fine Sandy Loam Sandy Clay Loam Clay Loam	CL CL-ML SC	A-2 A-4	0	0	65-100	50-100	35-100	20-80	23-50	7-28
	68-74	Sandy Loam Loam Sandy Clay Loam	CL SC	A-2 A-6	0	0	50-100	35-100	21-90	10-80	27-44	12-25
Emporia	0-17	Sandy Loam Loam Fine Sandy Loam	CL ML SC SM	A-2 A-4 A-6	0	0	90-100	80-100	48-95	24-75	19-33	3-12
	17-51	Sandy Clay Loam Sandy Clay Loam Clay Clay Loam Fine Sandy Loam Gravelly Sandy Clay Loam	CL SC	A-2 A-6 A-7	0	0	65-100	50-100	45-95	30-80	31-50	14-29
	51-74	Gravelly Clay Loam Clay Loam Very Gravelly Sandy Clay Loam Clay	CL ML SC SM	A-1 A-2 A-4 A-6	0	0	50-100	35-100	28-100	12-95	18-50	2-29



Man Comphal			Class	fication	Fragi	ments	Per	cent Passin	g Sieve Nun	nber	المنسنا	Disatisity
Map Symbol and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	- Liquid Limit	Plasticity Index
	In	•	•	•	Pct	Pct	•	•			Pct	
11A:												
11B:												
Kempsville	0-7	Sandy Loam Fine Sandy Loam Loamy Sand	CL-ML ML SC-SM SM	A-2 A-4	0	0	90-100	80-100	40-85	12-55	17-31	2-10
	7-68	Loam Fine Sandy Loam Sandy Clay Loam Clay Loam	CL CL-ML SC	A-2 A-4	0	0	65-100	50-100	35-100	20-80	23-50	7-28
Emporia	68-74	Sandy Loam Loam Sandy Clay Loam	CL SC	A-2 A-6	0	0	50-100	35-100	21-90	10-80	27-44	12-25
Emporia	0-17	Sandy Loam Loam Fine Sandy Loam	CL ML SC SM	A-2 A-4 A-6	0	0	90-100	80-100	48-95	24-75	19-33	3-12
	17-51	Sandy Clay Sandy Clay Loam Loam Clay Fine Sandy Loam Clay Loam Gravelly Sandy Clay Loam	CL SC	A-2 A-6 A-7	0	0	65-100	50-100	45-95	30-80	31-50	14-29
	51-74	Gravelly Clay Loam Clay Loam Very Gravelly Sandy Clay Loam Clay	CL ML SC SM	A-1 A-2 A-4 A-6	0	0	50-100	35-100	28-100	12-95	18-50	2-29
Roanoke												

Caroline County, Virginia

Man Owel al			Class	ification	Frag	ments	Per	cent Passin	g Sieve Num	nber	Limital	Disatists
Map Symbol and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	Liquid Limit	Plasticity Index
	In	•	•	•	Pct	Pct	•	•			Pct	<u>. </u>
11C:												
Kempsville	0-7	Sandy Loam Fine Sandy Loam Loamy Sand	CL-ML ML SC-SM SM	A-2 A-4	0	0	90-100	80-100	40-85	12-55	17-31	2-10
	7-68	Sandy Clay Loam Clay Loam Loam Fine Sandy Loam	CL CL-ML SC	A-2 A-4	0	0	65-100	50-100	35-100	20-80	23-50	7-28
	68-74	Sandy Clay Loam Sandy Loam Loam	CL SC	A-2 A-6	0	0	50-100	35-100	21-90	10-80	27-44	12-25
Emporia	0-17	Sandy Loam Loam Fine Sandy Loam	CL ML SC SM	A-2 A-4 A-6	0	0	90-100	80-100	48-95	24-75	19-33	3-12
	17-51	Sandy Clay Loam Loam Sandy Clay Gravelly Sandy Clay Loam Clay Clay Loam Fine Sandy Loam	CL SC	A-2 A-6 A-7	0	0	65-100	50-100	45-95	30-80	31-50	14-29
	51-74	Very Gravelly Sandy Clay Loam Clay Gravelly Clay Loam Clay Loam	CL ML SC SM	A-1 A-2 A-4 A-6	0	0	50-100	35-100	28-100	12-95	18-50	2-29
Roanoke												

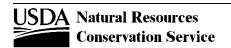
12A:



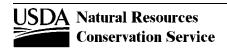
Caroline County, Virginia

Man Ownshal			Class	ification	Fragi	ments	Per	cent Passin	g Sieve Nun	nber	I described	District
Map Symbol and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	- Liquid Limit	Plasticity Index
	In	•	•	•	Pct	Pct	•	•	•	•	Pct	
12A:												
Myatt	0-9	Sandy Loam Loam Fine Sandy Loam	CL-ML	A-4	0	0	99-100	98-100	59-95	29-75	21-43	6-17
	9-53	Clay Loam	CL	A-2	0	0	99-100	98-100	59-100	29-80	27-44	12-25
	0 00	Sandy Clay Loam	SC	A-6	·	Ū	00 .00	00 .00	00 .00	_0 00		
		Sandy Loam	SC-SM	A-7								
	53-72	Sandy Loam	CL	A-2	0	0	99-100	98-100	59-90	29-55	18-40	3-21
		Sandy Clay Loam	CL-ML	A-4								
		Fine Sandy Loam	sc	A-6								
		·	SC-SM									
Slagle	0-12	Fine Sandy Loam Sandy Loam	SC SC-SM	A-2 A-4	0	0	95-100	93-100	55-85	27-55	20-33	4-12
	12-57	Sandy Loam	CL	A-6	0	0	95-100	93-100	55-100	27-80	29-50	12-29
	12-07	Sandy Clay Loam Clay Loam	SC	A-7	Ü	Ü	30-100	30-100	33-100	21-00	25-50	12-23
	57-62	Loamy Sand	CL	A-1	0	0	90-100	80-100	40-100	12-95	16-49	2-28
		Sandy Loam	ML	A-2								
		Silty Clay	SC	A-4								
		Sandy Clay Loam	SM	A-6								
Emporia												
Kempsville												

13E:



Map Symbol			Classi	fication	Fragi	ments	Per	cent Passin	g Sieve Nun	nber	Liquid	Plasticity
and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	Limit	Index
13E:	In				Pct	Pct					Pct	
Nevarc	0-9	Loam Fine Sandy Loam	SC SC-SM	A-2 A-4	0	0	90-100	80-100	48-95	24-75	20-33	4-12
	9-57	Sandy Loam Silty Clay Loam Silty Clay Clay Clay Loam Sandy Clay Loam	CH CL	A-6 A-7	0	0	90-100	80-100	64-100	28-95	39-63	21-40
	57-62	Sandy Clay Sandy Clay Loam Gravelly Sand Sandy Loam Clay Gravelly Sandy Clay Loam	CL ML SC SM	A-1 A-2 A-4 A-6	0	0	70-100	50-100	25-100	2-95	0-57	NP-36
Remlik												
Kempsville												
14: Pits, gravel												
Appling												
Emporia												
Kempsville												
Slagle												
Udorthents												



Map Symbol			Classi	fication	Fragi	ments	Per	cent Passin	g Sieve Nun	nber	Liquid	Plasticity
and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	Limit	Index
	In	-	•		Pct	Pct	•	•		•	Pct	
15A:												
Rappahannock	0-17	Mucky Peat Muck	PT	A-8	0	0						
	17-62	Stratified Sand To Silty Clay Silty Clay Loam	CL ML SC SM	A-2 A-4 A-6	0	0	100	100	50-100	5-95	0-76	NP-34
Chastain												
Chewacla												
Riverview												
16B:												
Remlik	0-6	Loamy Fine Sand Sand Loamy Sand	SM	A-2	0	0	90-100	80-100	40-85	4-45	0-28	NP-7
	6-30	Loamy Sand Gravelly Loamy Sand Sand Gravelly Sand	SC-SM SM SW-SM	A-1 A-2	0	0	60-100	50-100	25-75	2-30	0-24	NP-6
	30-59	Gravelly Sandy Loam Sandy Clay Loam Fine Sandy Loam Sandy Loam	SC SC-SM	A-2 A-4 A-6	0	0	60-100	50-100	30-90	15-55	18-36	4-17
	59-72	Gravelly Sand Gravelly Loamy Sand Sand Loamy Sand	SC-SM SM SP-SM	A-2 A-3	0	0	60-100	50-100	25-75	2-30	0-24	NP-7
Emporia												

Caroline County, Virginia

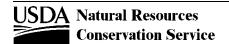
Mars Ormalisal			Class	ification	Fragi	ments	Per	cent Passin	g Sieve Nun	nber	Limital	Disatisit
Map Symbol and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	Liquid Limit	Plasticity Index
	In	•	•		Pct	Pct	•	•	•	•	Pct	
16B:												
Slagle												
16C:												
Remlik	0-6	Loamy Sand Loamy Fine Sand Sand	SM	A-2	0	0	90-100	80-100	40-85	4-45	0-28	NP-7
	6-30	Gravelly Loamy Sand Loamy Sand Gravelly Sand Sand	SC-SM SM SW-SM	A-1 A-2	0	0	60-100	50-100	25-75	2-30	0-24	NP-6
	30-59	Fine Sandy Loam Sandy Loam Gravelly Sandy Loam Sandy Clay Loam	SC SC-SM	A-2 A-4 A-6	0	0	60-100	50-100	30-90	15-55	18-36	4-17
	59-72	Gravelly Loamy Sand Gravelly Sand Loamy Sand Sand	SC-SM SM SP-SM	A-2 A-3	0	0	60-100	50-100	25-75	2-30	0-24	NP-7
Emporia												
Slagle												

16E:

Map Symbol			Classi	fication	Fragi	ments	Per	cent Passing	g Sieve Nun	nber	Limite	Diaghicit
and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	- Liquid Limit	Plasticity Index
	In	•			Pct	Pct					Pct	
16E:												
Remlik	0-6	Loamy Sand Loamy Fine Sand Sand	SM	A-2	0	0	90-100	80-100	40-85	4-45	0-28	NP-7
	6-30	Loamy Sand Gravelly Loamy Sand Sand Gravelly Sand	SC-SM SM SW-SM	A-1 A-2	0	0	60-100	50-100	25-75	2-30	0-24	NP-6
	30-59	Gravelly Sandy Loam Sandy Clay Loam Fine Sandy Loam Sandy Loam	SC SC-SM	A-2 A-4 A-6	0	0	60-100	50-100	30-90	15-55	18-36	4-17
	59-72	Gravelly Sand Gravelly Loamy Sand Sand Loamy Sand	SC-SM SM SP-SM	A-2 A-3	0	0	60-100	50-100	25-75	2-30	0-24	NP-7
Emporia												
Nevarc												
17D:												
Rion	0-4	Sandy Loam	SM	A-2 A-4	0	0	90-100	80-100	48-70	24-40	17-35	2-13
	4-39	Clay Loam Sandy Clay Loam Sandy Loam	CL SC SC-SM	A-2 A-6	0	0	90-100	80-100	48-100	24-80	27-44	12-25
	39-72	Sandy Loam	SC SC-SM SM	A-2 A-4 A-6	0	0	90-100	80-100	48-70	24-40	18-32	3-13
Helena												

Caroline County, Virginia

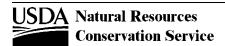
Map Symbol			Classi	fication	Fragi	ments	Per	cent Passin	g Sieve Nun	nber	Liquid	Plasticity
and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	Limit	Index
	In				Pct	Pct					Pct	
17D: Wateree												
wateree												
Rock outcrop												
18A:												
Riverview	0-4	Silt Loam	CL	A-4	0	0	100	100	85-95	60-75	21-41	6-19
	4.45	Loam	CL-ML	A-6	0	0	400	400	70.400	40.00	00.45	40.05
	4-45	Clay Loam Loam	CL	A-6	0	0	100	100	70-100	40-80	28-45	12-25
		Fine Sandy Loam										
		Sandy Clay Loam										
	45-62	Loamy Fine Sand	SC-SM SM	A-2 A-4	0	0	100	100	50-85	5-55	16-31	1-12
		Loamy Sand Fine Sandy Loam	SIVI	A-4								
		Sand										
		Sandy Loam										
Altavista												
D :												
Bojac												
Chastain												
Chewacla												
State												
Rappahannock												



19A:

Man Cumhal			Classi	fication	Fragi	ments	Per	cent Passin	g Sieve Nun	nber	المناسنا	Disatisit
Map Symbol and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	- Liquid Limit	Plasticity Index
	In		•		Pct	Pct		•	•	•	Pct	
19A:												
Roanoke	0-12	Silt Loam Loam Fine Sandy Loam	CL CL-ML SC SC-SM	A-4 A-6	0	0	90-100	85-100	60-100	34-90	21-43	6-18
	12-49	Clay Loam Silty Clay Loam Clay Silty Clay	CH CL	A-7	0	0	90-100	85-100	76-100	60-95	39-67	21-44
	49-62	Stratified Sand To Clay Clay	CH CL ML SM	A-2-4 A-4 A-6 A-7	0	0	90-100	85-100	42-100	4-95	0-67	NP-44
Altavista												
Chastain												
Slagle												
20B:												
Rumford	0-11	Fine Sandy Loam Sandy Loam Loamy Sand	SM	A-1 A-2	0	0	90-100	80-100	40-85	12-55	0-26	NP-7
	11-40	Sandy Loam Fine Sandy Loam	SC SC-SM	A-2 A-4 A-6	0	0	90-100	80-100	48-85	24-55	18-38	4-19
	40-62	Loamy Sand	GM SC-SM SM	A-1 A-2 A-3	0	0	50-100	35-100	18-75	5-30	0-30	NP-12
Emporia												

Map Symbol			Classi	fication	Fragi	ments	Per	cent Passino	g Sieve Nun	nber	Liquid	Plasticity
and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	Limit	Index
	ln		•		Pct	Pct	•				Pct	•
20B:												
Slagle												
20C:												
Rumford	0-11	Loamy Sand Fine Sandy Loam Sandy Loam	SM	A-1 A-2	0	0	90-100	80-100	40-85	12-55	0-26	NP-7
	11-40	Sandy Loam Fine Sandy Loam	SC SC-SM	A-2 A-4 A-6	0	0	90-100	80-100	48-85	24-55	18-38	4-19
	40-62	Loamy Sand	GM SM	A-6 A-1 A-2 A-3	0	0	50-100	35-100	18-75	5-30	0-30	NP-12
Emporia												
Slagle												
20D:												
Rumford	0-11	Loamy Sand Fine Sandy Loam Sandy Loam	SM	A-1 A-2	0	0	90-100	80-100	40-85	12-55	0-26	NP-7
	11-40	Sandy Loam Fine Sandy Loam	SC SC-SM	A-2 A-4 A-6	0	0	90-100	80-100	48-85	24-55	18-38	4-19
	40-62	Loamy Sand	GM SM	A-1 A-2 A-3	0	0	50-100	35-100	18-75	5-30	0-30	NP-12
Emporia												
Nevarc												



Caroline County, Virginia

Map Symbol			Classi	fication	Fragi	ments	Per	cent Passin	g Sieve Nun	nber	Liquid	Plasticity
and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	Limit	Index
	In	•			Pct	Pct	•				Pct	•
20D:												
Slagle												
21C:												
Slagle	0-12	Sandy Loam Fine Sandy Loam	SC SC-SM	A-2 A-4	0	0	95-100	93-100	55-85	27-55	20-33	4-12
	12-57	Clay Loam Sandy Loam Sandy Clay Loam	CL SC	A-6 A-7	0	0	95-100	93-100	55-100	27-80	29-50	12-29
	57-62	Silty Clay Loamy Sand Sandy Clay Loam Sandy Loam	CL ML SC SM	A-1 A-2 A-4 A-6	0	0	90-100	80-100	40-100	12-95	16-49	2-28
Kempsville	0-7	Fine Sandy Loam Loamy Sand Sandy Loam	CL-ML ML SC-SM SM	A-2 A-4	0	0	90-100	80-100	40-85	12-55	17-31	2-10
	7-68	Loam Fine Sandy Loam Sandy Clay Loam Clay Loam	CL CL-ML SC	A-2 A-4	0	0	65-100	50-100	35-100	20-80	23-50	7-28
	68-74	Sandy Loam Loam Sandy Clay Loam	CL SC	A-2 A-6	0	0	50-100	35-100	21-90	10-80	27-44	12-25
excessivley drained sandy soils												
moderately well drained coarse loamy soils												

22A:



Map Symbol			Classi	fication	Fragi	ments	Per	cent Passin	g Sieve Nun	nber	Liquid	Plasticity
and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	Limit	Index
	In				Pct	Pct	•	•		•	Pct	
22A:												
Slagle	0-12	Fine Sandy Loam	SC	A-2	0	0	95-100	93-100	55-85	27-55	20-33	4-12
		Sandy Loam	SC-SM	A-4								
	12-57	Clay Loam	CL	A-6	0	0	95-100	93-100	55-100	27-80	29-50	12-29
		Sandy Loam	SC	A-7								
		Sandy Clay Loam	01		•	•	00.400	00.400	40.400	40.05	40.40	0.00
	57-62	Silty Clay	CL	A-1	0	0	90-100	80-100	40-100	12-95	16-49	2-28
		Loamy Sand	ML SC	A-2 A-4								
		Sandy Clay Loam Sandy Loam	SM	A-4 A-6								
		Salidy Loalli	SIVI	A-0								
Myatt												
Roanoke												
Rumford												
Suffolk												
Bama												
Kempsville												
22B:												
Slagle	0-12	Fine Sandy Loam	SC	A-2	0	0	95-100	93-100	55-85	27-55	20-33	4-12
-		Sandy Loam	SC-SM	A-4								
	12-57	Clay Loam	CL	A-6	0	0	95-100	93-100	55-100	27-80	29-50	12-29
		Sandy Loam	SC	A-7								
		Sandy Clay Loam										
	57-62	Silty Clay	CL	A-1	0	0	90-100	80-100	40-100	12-95	16-49	2-28
		Sandy Clay Loam	ML	A-2								
		Sandy Loam	SC	A-4								
		Loamy Sand	SM	A-6								

Caroline County, Virginia

Map Symbol			Classi	fication	Fragi	ments	Per	cent Passin	g Sieve Num	nber	Liquid	Plasticity
and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	Limit	Index
	In		•	•	Pct	Pct		•			Pct	•
22B:												
Bama												
Kempsville												
Myatt												
Roanoke												
Rumford												
23A:												
State	0-17	Sandy Loam Fine Sandy Loam	CL-ML ML SC-SM SM	A-2 A-4	0	0	99-100	98-100	59-85	29-55	17-31	2-10
	17-53	Sandy Loam Sandy Clay Loam Clay Loam Loam	CL SC	A-6	0	0	99-100	98-100	59-100	29-80	27-43	12-24
	53-62	Stratified Gravelly Sand To Sandy Loam Gravelly Loamy Sand	SC-SM SM SP-SM	A-1 A-2 A-3 A-4	0	0	75-100	63-100	40-90	5-50	0-27	NP-10
Chewacla												
Tarboro												

23B:



Map Symbol			Classi	fication	Frag	ments	Per	cent Passin	g Sieve Nun	nber	Liquid	Disatisitu
and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	Limit	Plasticity Index
	In	•	•		Pct	Pct		•		•	Pct	
23B:						_						
State	0-17	Sandy Loam Fine Sandy Loam	CL-ML ML SC-SM SM	A-2 A-4	0	0	99-100	98-100	59-85	29-55	17-31	2-10
	17-53	Sandy Loam Sandy Clay Loam Clay Loam Loam	CL SC	A-6	0	0	99-100	98-100	59-100	29-80	27-43	12-24
	53-62	Stratified Gravelly Sand To Sandy Loam Gravelly Loamy Sand	SC-SM SM SP-SM	A-1 A-2 A-3 A-4	0	0	75-100	63-100	40-90	5-50	0-27	NP-10
Chewacla												
Riverview												
Tarboro												
23C:												
State	0-17	Sandy Loam Fine Sandy Loam	CL-ML ML SC-SM SM	A-2 A-4	0	0	99-100	98-100	59-85	29-55	17-31	2-10
	17-53	Sandy Loam Sandy Clay Loam Clay Loam Loam	CL SC	A-6	0	0	99-100	98-100	59-100	29-80	27-43	12-24
	53-62	Stratified Gravelly Sand To Sandy Loam Gravelly Loamy Sand	SC-SM SM SP-SM	A-1 A-2 A-3 A-4	0	0	75-100	63-100	40-90	5-50	0-27	NP-10



Map Symbol			Classi	fication	Fragments		Per	cent Passin	g Sieve Nun	nber Liquid		Plasticity
and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	Limit	Index
	In			-	Pct	Pct					Pct	
23C:												
Tarboro												
24A:												
Suffolk	0-20	Loamy Fine Sand Sandy Loam Fine Sandy Loam	CL-ML ML SC-SM	A-2 A-4	0	0	95-100	93-100	55-85	27-55	18-33	3-12
	20-45	Sandy Loam Clay Loam Sandy Clay Loam	SM CL SC	A-2 A-6	0	0	95-100	93-100	55-100	27-80	20-43	6-23
	45-62	Loamy Sand Sand Loamy Fine Sand	SC-SM SM SP	A-1 A-2 A-4	0	0	85-100	78-100	39-85	4-45	15-23	1-6
Emporia												
24B:												
Suffolk	0-20	Fine Sandy Loam Loamy Fine Sand Sandy Loam	CL-ML ML SC-SM SM	A-2 A-4	0	0	95-100	93-100	55-85	27-55	18-33	3-12
	20-45	Sandy Loam Clay Loam Sandy Clay Loam	CL SC	A-2 A-6	0	0	95-100	93-100	55-100	27-80	20-43	6-23
	45-62	Loamy Sand Sand Loamy Fine Sand	SC-SM SM SP	A-1 A-2 A-4	0	0	85-100	78-100	39-85	4-45	15-23	1-6
Emporia												
25B:												

Caroline County, Virginia

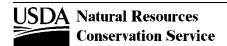
Map Symbol and Soil Name		USDA Texture	Classi	Classification		Fragments		Percent Passing Sieve Number				Plasticity
	Depth		Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	Liquid Limit	Index
	ln	•		•	Pct	Pct	•	•	•	•	Pct	
25B:												
Tarboro	0-9	Sand Loamy Sand	SM SW-SM	A-1 A-2 A-3	0	0	95-100	93-100	40-99	8-35	0-26	NP-7
	9-62	Loamy Sand Loamy Coarse Sand Sand	SM SP SP-SM SW-SM	A-1 A-2 A-3	0	0	95-100	50-100	25-75	2-30	0-20	NP-4
Bojac	0-8	Sandy Loam Fine Sandy Loam Loamy Sand Loamy Fine Sand	CL-ML ML SC-SM SM	A-2 A-4	0	0	95-100	93-100	46-85	14-55	0-33	NP-12
	8-35	Fine Sandy Loam Sandy Loam Loam	SC-SM	A-2 A-4	0	0	95-100	93-100	55-85	27-55	18-30	4-12
	35-62	Loamy Sand Sand	SM SP	A-1 A-2 A-3	0	0	85-100	80-100	40-75	4-30	0-20	NP-3
Altavista												

26A:

Man Cumbal			Class	fication	Fragments		Per	cent Passin	Liquid	Plasticity		
Map Symbol and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	Limit	Index
	In	•	•	•	Pct	Pct	•				Pct	•
26A:												
Tomotley	0-10	Fine Sandy Loam Loamy Sand Loam Silt Loam Sandy Loam	SC-SM SM	A-2 A-4	0	0	95-100	93-100	46-100	14-90	18-43	2-13
	10-28	Loam Sandy Loam Fine Sandy Loam	CL SC SC-SM	A-2 A-6	0	0	95-100	93-100	55-85	27-55	28-45	12-25
	28-48	Sandy Clay Loam Clay Clay Loam Loam	CL SC SC-SM	A-4 A-6 A-7	0	0	95-100	93-100	74-100	32-80	24-53	9-32
	48-62	Very Gravelly Sand Sand Silty Clay Loam Sandy Clay Loam	CL CL-ML SC SC-SM SP-SC	A-2 A-4 A-6 A-7	0	0	45-100	35-100	18-100	2-95	0-57	NP-36
Roanoke	0-12	Silt Loam Loam Fine Sandy Loam	CL CL-ML SC SC-SM	A-4 A-6	0	0	90-100	85-100	60-100	34-90	21-43	6-18
	12-49	Clay Loam Silty Clay Clay Silty Clay Loam	CH CL	A-7	0	0	90-100	85-100	76-100	60-95	39-67	21-44
	49-62	Stratified Sand To Clay Clay	CH CL ML SM	A-2-4 A-4 A-6 A-7	0	0	90-100	85-100	42-100	4-95	0-67	NP-44
Altavista												



Map Symbol			Classi	fication	Fragments		Per	cent Passin	Liquid	Plasticity		
and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	Limit	Index
	In		•		Pct	Pct	•				Pct	
26A: Riverview												
Bojac												
Chastain												
Chewacla												
State												
27C:												
Udorthents												
Bibb												
Bojac												
Emporia												
28A:												
Wehadkee	0-8	Silt Loam	CL ML	A-6 A-7	0	0	100	100	90-100	70-90	21-47	3-18
	8-22	Silt Loam Loam Sandy Clay Loam Clay Loam Silty Clay Loam	CL	A-6 A-7	0	0	100	100	85-100	60-95	27-47	12-24
	22-72	Sandy Loam Sandy Clay Loam Loam	CL SC	A-4 A-6 A-7	0	0	100	100	60-95	30-75	18-47	4-24



Caroline County, Virginia

Map Symbol		USDA Texture	Classi	Classification		Fragments		Percent Passing Sieve Number				Plasticity
and Soil Name	Depth		Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	Liquid Limit	Index
	In		•	•	Pct	Pct	•				Pct	
28A:												
Riverview												
Helena												
29A:												
Wickham	0-10	Loamy Sand Fine Sandy Loam Sandy Loam Loam	CL-ML SC-SM	A-4	0	0	99-100	98-100	49-95	14-75	20-31	4-10
	10-50	Sandy Loam Loam Clay Loam Sandy Clay Loam	CL SC	A-2 A-6 A-7-6	0	0	99-100	98-100	59-100	29-80	27-44	12-25
	50-72	Gravelly Sand Loamy Sand Gravelly Loamy Sand Sand	SM	A-2	0	0	75-100	63-100	31-75	3-30	0-25	NP-7
Altavista												

29B:

Map Symbol			Classification		Fragments		Percent Passing Sieve Number				Liquid	Plasticity
and Soil Name	Depth	USDA Texture	Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200	Limit	Index
	In		•	•	Pct	Pct	•	•			Pct	-
29B:												
Wickham	0-10	Sandy Loam Loam Loamy Sand Fine Sandy Loam	CL-ML SC-SM	A-4	0	0	99-100	98-100	49-95	14-75	20-31	4-10
	10-50	Loam	CL	A-2	0	0	99-100	98-100	59-100	29-80	27-44	12-25
		Sandy Loam Sandy Clay Loam Clay Loam	SC	A-6 A-7-6								
	50-72	Gravelly Loamy Sand Sand Gravelly Sand Loamy Sand	SM	A-2	0	0	75-100	63-100	31-75	3-30	0-25	NP-7
somewhat poorly drained soils												
30E:												
Wateree	0-2	Sandy Loam	SM	A-2 A-4	0-1	0-5	85-100	80-100	48-70	24-40	17-31	2-12
	2-38	Channery Fine Sandy Loam Channery Sandy Loam Fine Sandy Loam Sandy Loam	SM	A-2	0	0-5	65-100	50-100	30-85	15-55	16-30	2-12
	38-44	Bedrock										
	44-79	Bedrock										
Rock outcrop	0-60	Unweathered Bedrock									0-14	
Rion												
W:												
Water												

